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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of

Implementation of the Local Competition  
Provisions in the Telecommunications Act  
of 1996

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CC Docket No. 96-98

REPLY COMMENTS OF GVNW INC./MANAGEMENT

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## SUMMARY

GVNW is a consulting firm representing small independent local exchange carriers (ILECs) from a number of states. Issues of major concern upon which we offer reply comments include the following:

- a. Contrary to assertions by commentators, national standards should not be established for electronic system interfaces for all ILECs since the costs imposed in doing so for small ILECs are too great in comparison to the potential benefits.
- b. In using TSLRIC forward looking costs should be used for all elements of cost including cost of capital and depreciation expense.
- c. The Hatfield Model is not an appropriate vehicle at this time for imposing national or state level TSLRIC based rates for unbundled elements since the model has not been verified, uses arbitrary assumptions, does not use data appropriate for small ILECs, and uses inadequate methods of estimating expenses.
- d. In determining wholesale discount levels the Commission should not arbitrarily designate certain accounts as retail only since activities recorded in these accounts are necessary for servicing wholesale customers or co-carriers.

GVNW Inc./Management (GVNW) is a consulting firm representing small incumbent local exchange companies (ILECs). In response to the Commission's Notice of Proposed Rulemaking (NPRM) in the above referenced docket, GVNW offers the following comments in reply to comments filed in the May 16, 1996 filing.

National Standards for Operating System Interfaces

Various commentors support the notion that the FCC should impose national standard interfaces to ILEC operating systems of various types including service order processing, trouble reporting, assignment, and other systems. AT&T, for example, indicates that rules requiring minimum national requirements for electronic ordering interfaces are "absolutely critical."<sup>1</sup> Other commentors indicate that ILECs should be required to provide access to such systems so that they can compete effectively with the ILECs.<sup>2</sup> While making these assertions, none of these commentors recognizes that all ILECs are not Regional Bell Operating Companies (RBOCs) and that all ILECs do not serve millions of customers. AT&T cites as an example for why such access needs to be given its experience in Rochester, New York and complains that non-mechanized systems were inefficient and ineffective when it was dealing with hundreds of customers per day.<sup>3</sup> That may be true. We leave it to companies with operations of this size to respond to those allegations and concerns.

However, for the majority of ILECs, with a few hundred to a few thousand customers, at most, the situation is vastly different. Their internal operational

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<sup>1</sup>See Comments of AT&T Corp. filed May 16, 1996, Page 34.

<sup>2</sup>See, for example, Comments of Competitive Telecommunications Association (Comptel) filed May 16, 1996, pp. 37-38.

<sup>3</sup>AT&T, op. cit., p. 34.

systems are substantially different from those of the RBOCs. They are not built based on a Bellcore standard established several years ago. Many are based on PC or very small computer based systems with no interfaces to other systems, or with interfaces based on vendor developed "non-Bellcore standard" requirements. Some companies still use manual systems internally. To require these companies to adhere to a national standard based on RBOC capabilities and requirements would be extremely expensive and is totally unnecessary. While AT&T may have a legitimate complaint when it deals with hundreds of orders a day from a company, it should be able to use non-standard or even manual systems to deal with the two or three orders per week that might come from a small ILEC operating area. A small ILEC whose total revenues are lost in the rounding in AT&T's or MCI's financial statements should not be required to expend thousands of dollars so that AT&T can mechanically interface to that ILECs system for a few orders per month. The FCC in its deliberations on this and many other issues must recognize that small ILECs are very different from the RBOCs and, if requirements are to be determined by the FCC, must implement them in ways that recognize the vast difference between small ILECs and RBOCs and similar sized companies.

#### TSLRIC Costing Issues

Many commentators strongly support the use of Total Service Long-Run Incremental Costs (TSLRIC) as the appropriate costing methodology for developing rates for network elements.<sup>4</sup> AT&T includes one hundred five pages of vita

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<sup>4</sup>See, for example, AT&T pp. 45-73, Appendices C and E.; Comptel, op. cit., pp. 67-80; Comments of MCI Telecommunications Corporation filed May 16, 1996, pp. 61-70.

information about the signers of its affidavit submitted as Appendix C to presumably bolster the its argument that TSLRIC is the appropriate economic vehicle for this pricing. The level of detail provided and description of what TSLRIC is varies between commentors. If the Commission moves forward with the use of some TSLRIC methodology it should be certain that it provides adequate descriptions and flexibility so that the studies adequately deal with the issues raised below.

a. Level of costs included in the TSLRIC studies.

AT&T emphasizes in its comments that there should be little need for attribution of "shared" or "common" costs on top of TSLRIC studies because such studies should include all of the incremental costs of providing the service.<sup>5</sup> AT&T further recognizes that TSLRIC costs may include costs normally accounted for as corporate operations expense when it states: "Current ILEC accounting systems often classify certain expenses (e.g., the president's salary) as "common" or "overhead" even though a large portion of the expenses may be variable with respect to the volume of business, and attributable to particular network elements. Regardless of the arbitrary accounting label, costs of this kind are properly included in the TSLRIC of the relevant network element."<sup>6</sup>

The FCC needs to ensure that no artificial limits are placed in the development of TSLRIC studies which preclude the identification of incremental cost changes of this nature. If an RBOC were to divest itself of all its loop investment and all activities associated with supporting and maintaining loops it can be expected that its

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<sup>5</sup>See AT&T op. cit., p. 62.

<sup>6</sup>Ibid., Appendix C, footnote 6, pp. 13-14.

corporate operations expenses would be changed. Such a change would substantially reduce its overall investment level (perhaps 25-35%) and its employee force. This would cause reductions in the need for corporate support personnel such as payroll accounting, human resources, accounts payable accounting, legal resources for personnel issues, and conceivably a reduction in the president's salary because of the smaller size of the firm. Such cost changes should legitimately be identified and included in the TSLRIC for the loop.

However, in practice this is seldom done. In some cases, corporate operations expenses are precluded from inclusion in TSLRIC studies and are presumed to be unchanged. In most cases, such as discussed more thoroughly below in relation to the Hatfield study, the primary focus of the TSLRIC is on the investment side and scant attention is paid to these expense level changes that accompany the provision of the service. This has led to proposals by some parties that in addition to TSLRIC a separate recovery of overhead be allowed in rates. If the TSLRIC is done properly and truly includes all the incremental costs associated with a service, this may not be necessary. It is incumbent on the FCC, if it adopts rules in this area, to ensure that the TSLRIC studies can, in practice, recover all the incremental costs.

b. Use of forward-looking costs.

Commentors supporting the use of TSLRIC emphasize that TSLRIC measures the forward-looking costs of providing the network elements in question not embedded, historic, or book costs. AT&T labels this "the most important principle"<sup>7</sup> in the development of TSLRIC studies. This principle is given high visibility, is

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<sup>7</sup>Ibid. p. 10, para 27.

loudly proclaimed as essential, and great efforts are expended to partially include it in model studies. Typically, great efforts are made to include forward-looking costs in regard to investments associated with network elements. Such efforts are not typically expended in developing other parts of the overall TSLRIC costs. For example, expense levels associated with TSLRIC studies are almost always based on historical embedded cost relationships and cost levels. The Hatfield model, proposed by AT&T and others, uses this approach.<sup>8</sup> Virtually no effort is expended to see whether such relationships are valid given the changes in forward-looking fully efficient investment from the embedded investment and expenses.

Cost of capital is another element that is typically not treated as that of a forward-looking, fully efficient, fully competitive firm. The Hatfield study, for example, uses a proposed equity return of 11.25%.<sup>9</sup> Sprint proposes that the cost of capital be based on "...the most recent authorized intrastate rate of return or prescribed interstate rate of return."<sup>10</sup> Neither of these proposals reflect the forward-looking capital costs of a fully competitive, fully efficient firm. Such firms expect and achieve significantly higher costs of equity from the market place. If forward-looking costs are economically correct as asserted by the supporters of TSLRIC, forward-looking costs of capital under the same assumptions as used for investments must be included in the TSLRIC studies.

The economic life of plant is another area where TSLRIC studies typically do not incorporate forward-looking costs. In the regulatory environment, the most

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<sup>8</sup>Ibid., Appendix E, p. 49.

<sup>9</sup>Ibid., p. 47.

<sup>10</sup>Comments of Sprint Corporation, filed May 16, 1996, p. 43.

typical approach is to use the regulatory approved depreciation lives as the estimate of the economic life of the plant. Only, perhaps, in rare cases do the regulatory approved depreciation lives reflect the economic life of plant in a fully-competitive environment. Generally such rates are set based on historical data regarding plant lives which do not reflect the fully-competitive forward-looking environment that is supported as the correct environment and assumption under which TSLRIC studies should be conducted. Again the Hatfield model presented by AT&T falls short in applying forward-looking costs in this area. For example, it includes an economic life for local switching of twenty years, a life that even many regulators have concluded is unrealistic and too long. Economic life assumptions of plant in a TSLRIC study should reflect the same forward-looking, fully-competitive, environment that is expected of other assumptions.

#### The Hatfield Model

AT&T has included in its filing a description of a model (Version 2.2, Release 1) developed by Hatfield Associates which it describes as a model to develop TSLRIC costs for the basic network elements that it proposes. AT&T further proposes that any ILEC proposing a rate higher than that developed by the Hatfield model have the burden of proving that "...the Hatfield Model does not, in that instance, accurately reflect TSLRIC principles".<sup>11</sup> MCI specifically proposes that the Hatfield model "...be used to determine the TSLRIC costs of unbundled network elements and other interstate rate elements on a state-by-state basis."<sup>12</sup> Other commentators support the

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<sup>11</sup>AT&T, p. 54.

<sup>12</sup>MCI, p. 68.



use of the Hatfield model as well.<sup>13</sup> We oppose the use of the Hatfield model as a specific national model for development of TSLRIC costs.

We have had limited time to review this latest version of the Hatfield model. From our cursory review it appears to incorporate a number of elements that make it improvement over the earlier Benchmark Cost Model. However,. numerous questions need to be asked and answered and additional evaluation needs to be made before this model, or a successor, could be considered an accurate means of developing TSLRIC costs for all ILECs in the country. We will outline the concerns we have identified with the model and its inputs below.

We would note that in a previous proceeding in California we had an opportunity to evaluate a prior version of the Hatfield model and the results that it produced on a limited scale. Specifically, comparisons between the model results and the actual costs of five small ILECs were made. Residential access line estimates from the model ranged from 20% to 34% greater than actual lines the companies serve. Though the access lines were substantially overstated, the estimated outside plant investments and central office switch investments estimated by the model were substantially less than those the companies have incurred. For example, for Pinnacles Telephone Company the model projected \$83,000 of switch investment to serve the residence customers, who represent 71% of the total customers. The actual switch investment is \$451,000 to serve all customers. Applying the 71% to make a linear allocation of the current investment would provide an approximate investment of \$320,210, some 3.85 times greater than the investment projected by the model. For

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<sup>13</sup>See, for example, Comptel, p. 68.

Volcano telephone company the model estimated switching investment of \$3,027,000 for the 83% residence customers. The actual allocated switch investment for residence customers (.83 x \$9,353,242) is \$7,763,191, 2.56 times the investment projected by the model. Similar results were seen in outside plant projections and in projections of operating expenses. The model consistently understated actual costs for small telephone companies.<sup>14</sup>

A review of the explanation of the model contained in Appendix E of AT&T's comments leads us to the following concerns regarding the Hatfield model:

a. Factors and Arbitrary Assumptions

The explanatory material for the Hatfield contains lists of numerous assumptions that have been made regarding cost factors, cost relationships, fill factors, plant type distributions etc., that provide much of the basis for development of the costs that the model produces.<sup>15</sup> There are dozens, perhaps hundreds, of these factors that have been included in the model. In most cases there are either no (or only generalized) explanations of the derivation of the factors and costs with no empirical data to support the validity of the factor. While these may reflect good faith efforts to develop valid data, it, at this time, is not verifiable and in many cases could clearly be shown to be invalid for specific companies and situations. Before giving consideration to adopting a model as the determination of prices for TSLRIC elements, each of these inputs should be tested and verified for validity.

In other cases, the model clearly contains inputs that appear to be fairly

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<sup>14</sup>See Reply Testimony of Michael L. Schlacter filed April 24, 1996 in California Case # R.95-01-020 and I.95-01-021.

<sup>15</sup>See AT&T, Appendix E, pp. 17-19, 20--21, 25-27, 30, 36, and 47.

arbitrary assumptions. For example, one of the critical factors in the model is the identification of six different density areas upon which virtually all the loop cost data is based. These areas reflect the number of subscribers per square mile and are identified as follows:<sup>16</sup>

<u>Zone</u>	<u>Density Range HH/Sq Mile</u>	<u>Ratio of High to Low Range Limit</u>
1	0-5	NA
2	5-200	40:1
3	200-650	3.25:1
4	650-850	1.31:1
5	850-2550	3:1
6	> 2550	NA

Of particular note is the disparity between the high and low limits in density range two, the range where a large part of small telco serving areas would reside. The high limit of the range is 40 times the low limit, where the other ranges have limits of less than four times the lower level. No explanation is offered as to why the particular ranges were chosen or to validate that the costs of serving areas with a density of five households per square mile are equivalent to the costs in areas where the density is 199 households per square mile. One would believe that there would be substantial differences in the costs of serving areas with that different a density level, but the model assumes that they are the same. Again, no explanation has been offered as to how this range or other density ranges were chosen and whether they have relevance to underlying cost considerations. At least in the case of density zone two, it is highly unlikely.

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<sup>16</sup>Ibid., p. 6.

While choosing to use factors developed and promulgated in the Benchmark Costing Model for many of its inputs, Hatfield chooses to change the fill factors for distribution cable for density zones one through three. The proffered reasoning is that the factors included in the BCM for these three density zones "...appear to reflect..." "...loop plant installed to pursue existing competitive and/or non-regulated services (e.g. Centrex) and/or new market opportunities (e.g. broadband services or enhanced services)." <sup>17</sup> Such an assertion is simply an arbitrary adjustment to the model, unsubstantiated by verifiable data. It is particularly curious since the RBOC markets where they would be most likely to employ such strategies and where they have announced plans for certain investments, are not the lowest three density zones, but the highest three density zones.

c. Data not representative of small companies

The model is also substantially suspect for use in developing rates for the majority of ILECs, the small ILECs, because data sources reflect primarily RBOC and other large LEC sources. For example, in discussing the development of switch costs, reference is made to "AT&T's 5ESS® and Northern Telecom DMS-100®" switch capacities and costs. These switches are used extensively by the large ILECs in urban areas, but are rarely used by small ILECs and in rural areas because they are too costly to serve such areas. Furthermore in developing switching costs an average independent switch size of 2,761 lines, derived from the FCC's Statistics of Communications Carriers was used. <sup>18</sup> These statistics reflect large independent

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<sup>17</sup>Ibid., p. 26.

<sup>18</sup>Ibid., p. 37.

companies, not small ones. For example, the 1993 Statistical Report, Rural Telephone Borrowers shows the average exchange size for REA borrowers in 1993 was only 1,097 subscribers.<sup>19</sup>

Other examples of this bias toward large company data includes the use of discounts of 25% to 40% for digital loop carrier equipment based on RBOC estimates<sup>20</sup> and the use of ARMIS data for the development of expense factors.<sup>21</sup> Small telephone companies do not participate in the ARMIS reporting system.

#### d. Development of Expense Levels

Our experience indicates that well over half of the typical costs of telecommunications services come from expenses as opposed to return on investment. The Hatfield Model spends considerable effort and resources developing the estimated forward-looking investments, but very little effort to develop specific expense levels. Expense information is based on historical information from carrier's ARMIS reports<sup>22</sup> rather than from any forward looking analysis. As indicated in the discussion above regarding forward-looking costs, depreciation expenses appear to be woefully inadequate since the model adopts unrealistically long economic lives for major investment categories. Lives adopted are related to past depreciation lives under a regulatory environment without competition and are not relevant to forward looking investments in a fully competitive environment.

While the model does recognize that some level of non-network related

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<sup>19</sup>See referenced report p. 24.

<sup>20</sup>AT&T op. cit., p. 29.

<sup>21</sup>Ibid., p. 7.

<sup>22</sup>Ibid., p. 48.

expenses should be included, the 10% factor used for variable expenses is not based on current industry experience but is allegedly a “conservative” number based on “similar service industries”.<sup>23</sup>

#### Development of Wholesale Discounts

In their comments several parties encourage the Commission to identify specific accounts in the FCC chart of accounts as totally applicable to retail services and thus totally avoidable in providing wholesale services. If the Commission reviews these account descriptions closely they will find that this is an inaccurate representation. Activities accounted for as Product Management, Sales, etc. will be necessary for the provision of wholesale services, though in some cases in a different fashion than they are for retail. The Commission should not arbitrarily adopt a list of accounts that are totally retail oriented, since such accounts likely do not exist. Only those costs directly avoidable should be examined when determining wholesale discount levels.

It is curious that Comptel in its comments cites discounts in the IXC industry as illustrative of the discounts that should be expected in the resale industry in view of their position on providing volume and time commitment discounts.<sup>24</sup> Virtually all IXC “wholesale” discounts related to substantial commitments to purchase a volume of service and in many cases time commitments are involved as well. Yet Comptel takes the position that “...no carrier should pay more than any other carrier when it purchases the same service or facility from the same ILEC.”<sup>25</sup>

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<sup>23</sup>Ibid., p. 49.

<sup>24</sup>Comptel, p. 98.

<sup>25</sup>Ibid., p. 106.

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

I, Robert C. Schoonmaker, of GVNW Inc./Management, hereby certify that a copy of the forgoing Reply Comments of GVNW Inc./Management. (*CC Docket No. 96-98*) was served on this 30th day of May 1996, by first class, U.S. mail, postage prepaid, to the parties on the attached pages.

A handwritten signature in black ink, appearing to read "Robert C. Schoonmaker", written over a horizontal line.

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